5

ABSTRACT OF THE DISCLOSURE

A reel-deployed printed circuit board for chip-on-board (COB) packages and a method for manufacturing COB packages using the reel printed circuit board are disclosed. The novel circuit board comprises an elongated, flexible base board and a plurality of unit boards defined within it by a plurality of slits cut through it. Each unit board comprises a plurality of bonding pads on its top surface, a plurality of contacts on its bottom surface, and a plurality of via holes that electrically connect the contacts to the bonding pads. The circuit board further comprises connection bars that connect the unit boards to the flexible base board. The method for manufacturing COB packages using the reel-deployed printed circuit board comprises the steps of forming the reel printed circuit board, attaching a semiconductor chip to it, connecting the semiconductor chip to the bonding pads, encapsulating the semiconductor chip, and separating the COB packages from the reel printed circuit board.